

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification<sup>4</sup> :

F03D 3/06

A2

(11) International Publication Number:

WO 89/10483

(43) International Publication Date: 2 November 1989 (02.11.89)

(21) International Application Number: PCT/BR89/00006

(22) International Filing Date: 10 April 1989 (10.04.89)

(30) Priority data:

PI 8801709

10 April 1988 (10.04.88)

BR

(71)(72) Applicant and Inventor: GONÇALVES DA SILVA,  
Jacqueline [BR/BR]; Rua Miguel Fernandes no 377 apt  
202, 20771-Meir, RJ (BR).

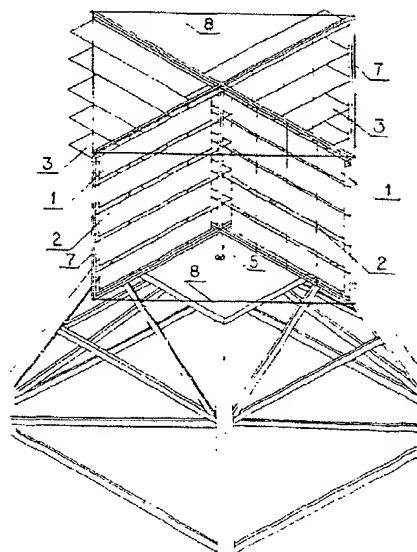
(81) Designated States: AT (European patent), BE (European patent), BF (OAPI patent), BJ (OAPI patent), CF (OAPI patent), CG (OAPI patent), CH (European patent), CM (OAPI patent), DE (European patent), FR (European patent), GA (OAPI patent), GB (European patent), IT (European patent), JP, LU (European patent), ML (OAPI patent), MR (OAPI patent), NL (European patent), SE (European patent), SN (OAPI patent), TD (OAPI patent), TG (OAPI patent), US.

**Published***Without international search report and to be republished upon receipt of that report.*

(54) Title: BINARY SYSTEM OF CATCHING EOLIC ENERGY

## (57) Abstract

Binary system of catching eolic energy having mobile surfaces (1, 3) interconnected by an axle (6), which blocks alternately the wind's passage in one axle's extremity or allows the wind's passage in the other extremity producing rotation's power due to wind's blockade. The system ables a windmill to turn in a certain direction independently of wind's direction according with the side of the mobile surfaces where the retainer nets (2) are fixed.



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BINARY SYSTEM OF CATCHING EOLIC ENERGY

The present invention refers to a catching wind mechanical energy system which uses mobile surfaces interconnected by an axle which blocks alternately the wind's passage in one axle's extremity or allows the wind's passage practically without resistance through the other extremity in the same axle.

According to the annexed drawings which integrate the report : figure 1 shows a front elevational view, partly in cross-section of the support tower and also shows the wind mill in itself; figure 2 shows a enlarged view from the area enclosed in a circle of the previous figure showing the details how the mobile surfaces axes pass through the motor axle; figure 3 shows a perspective which describes how the mobile surfaces actuate under the winds action.

As the drawings show the mobile surfaces(1,3) are interconnected by a common axle(6). These surfaces(1,3) are connected with the axle(6) forming a right angle between them. This axle(6) passes through the motor axle(5), called this way because this axle(5), will transmit the mechanical energy caught to the gear(4) in which we will be able to adapt the machine which we wish to move, like water pump or dynamo.

To the motor axle (5) is connected a holding board (7) which supports the mobile surfaces (1,3), to this board (7)

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is fixed the retainer net(2), called this way because it retains the mobile surfaces (1) which are under the wind's direct action against the retainer net(2). There are ties(8) also fixed to this board(7), which bring more rigidity to the whole.

When the mobile surfaces(1) are under the wind's action against the retainer net(2), they turn against the retainer net(2) making the mobile surfaces(3) on the other extremity of the axle(6) turns up far from the retainer net (2) leaving the wind blows through the surfaces.

The mobile surfaces(1) which are under the wind action against the retainer net(2) which is perpendicular to the motor axle(5), this way producing the windmill's rotation.

To windmill ever turns in clock-wise direction the retainer nets(2) must be back of the holding boards(7) and back of the mobile surfaces(1) situated at left-hand side of the motor axle(5) and this way being forward of the holding boards(7) situated right-hand side of the motor axle.

#### Preview about utilization:

This system allows the utilization of a great quantity of eolic energy because it is a modular system. It may be augmented upwards or laterally just by adding more mobile surfaces.

The whole rigidity will be obtained using ties which will avoid the holding board's twisting or flexure.

In case of management or fierce winds, in order to stop the windmill, interrupting its rotation, we have just to disable the retainer nets and then the windmill's power exercised against the tower will decreasing considerably.

This system may be profitable for: electrical generation, pump water or any other mechanical applications.

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The first step to build a windmill using this system, is the construction of concrete foundations of square basis (3m x 3m) measuring at least 20 cm of depth which will assure sufficient weight.

- 5        A metallic tower must be fixed to this basis (6m high), which is made of four corners (5cm x 7mm x 6m) fixed one upon others by corners measuring (25mm x 7mm) and fixed among them by screws (7mm).

10       The rollings must be fixed on the tower's top, in intermediate position and also fixed in the tower's basis so that the rollings will be nearly 2 meters among them.

15       An steel tube will pass between the rollings measuring 25mm diameter by 9 meters of length, which will have a gear fixed in its inferior part in which we will apply the desired machine.

20       To the motor axle will be fixed the holding boards which will be made of steel tubes (13mm) having 1mm wall, these boards measure 3 meters basis by 2 meters high, each one of them with a tube in the center in order to minimize the axle's flexure which drill the motor axle, this way these axes will have four mobile surfaces horizontally and four mobile surfaces vertically which sums 32 mobile surfaces in the whole windmill.

25       These surfaces may be made of an steel structure 2mm of thickness and made of strong plastic or cloth, these mobile surfaces must be fixed to an steel's axle (3mm Thickness) which drills the motor axle.

30       These surfaces measure 48cm by 146cm. The retainer net may be made of nylon thread in order to be removed or replaced easily. The steel ties must be placed in such a way that they will avoid the holding board's twisting or flexure.

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CLAIMS:

Claim 1 - "BINARY SYSTEM OF CATCHING EOLIC ENERGY", characterized in mobile surfaces which block the wind's passage at one side of the mobile surfaces and in another moment leave the wind blows through the mobile surfaces, producing rotation's power due to wind's blockade.

Claim 2 - "BINARY SYSTEM OF CATCHING EOLIC ENERGY", as claimed in claim 1, characterized in an axle which interconnects the mobile surfaces forming right angle between the surfaces.

Claim 3 - "BINARY SYSTEM OF CATCHING EOLIC ENERGY", as claimed in claim 1 and in claim 2, characterized in retainer nets which enable motor axle rotation's ever in a certain direction according with the side of the mobile surfaces where the retainer nets are fixed.

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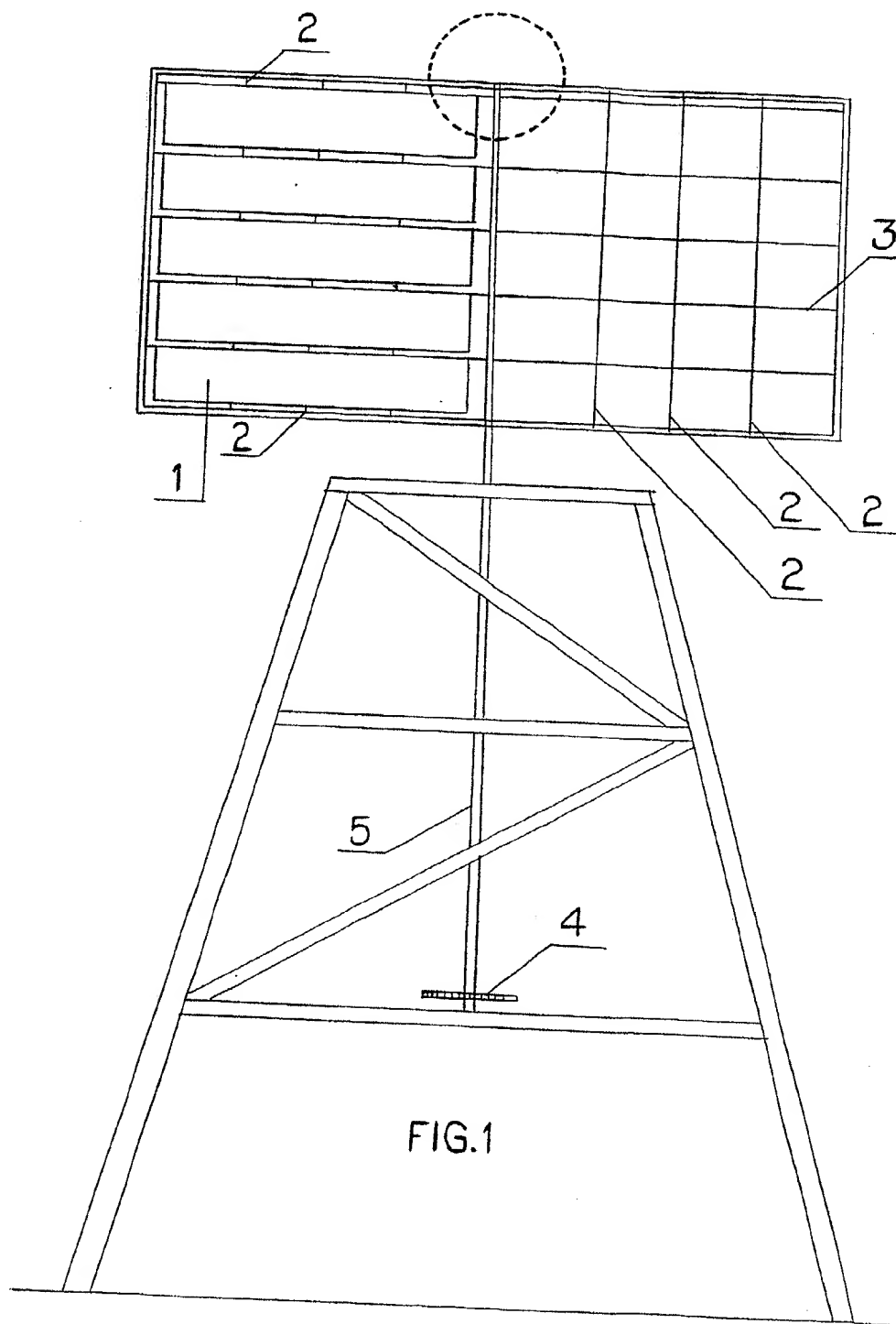


FIG.1

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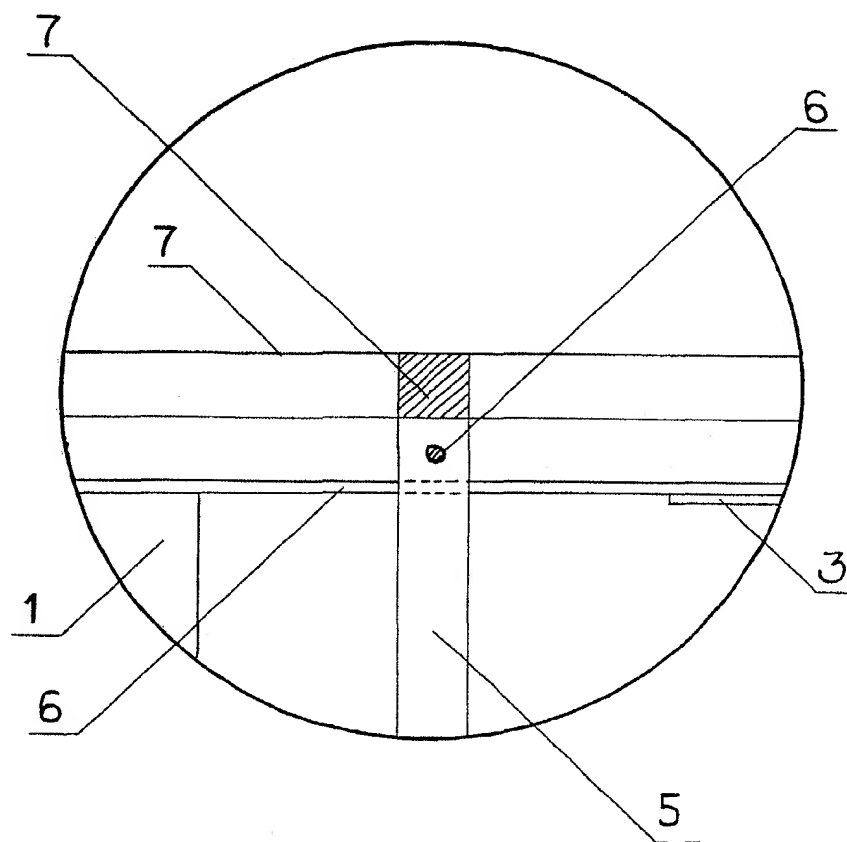


FIG. 2



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